City of Sunnyvale

Ten Year Project Costs

by Project Category and Type

Project Number	Project Name	Prior Years Actual	Revised Budget 2003-04	Plan 2004-05	Plan 2005-06	Plan 2006-07	Plan 2007-08	Plan 2008-09	Plan 2009-10	Plan 2010-11	Plan 2011-12	Plan 2012-13	Plan 2013-14	Ten Year Plan Total	**Project Grand Total**
Category:	**Special**														
Type:	**Sanitary Sewer**														
802951	WPCP Records Update														
		0	0	21,016	0	0	0	0	0	0	0	0	0	21,016	21,016
819550	Laboratory Information Management System														
		20,090	41,910	0	0	0	0	0	0	0	0	0	0	0	62,000
822530	Regulatory Compliance - Air/Emission Standards Requirements														
		173	48,712	0	0	0	0	0	0	0	0	0	0	0	48,885
822560	Energy Use Audit														
		0	75,000	300,000	0	0	0	0	0	0	0	0	0	300,000	375,000
822660	Feasibility Study of Effluent Disinfection Alternatives														
		21,495	23,505	0	0	0	0	0	0	0	0	0	0	0	45,000
823140	Structural and Infrastructure Assessment at WPCP														
		5,937	123,484	0	0	0	0	0	0	0	0	0	0	0	129,421
823220	Wastewater Data/Process/Service Assessment Studies														
		27,031	225,469	128,775	128,775	131,350	133,978	136,657	139,390	142,178	0	0	0	941,103	1,193,603
824340	Wastewater Cost of Service Study														
		0	0	42,440	0	0	0	47,373	0	0	0	51,777	0	141,590	141,590
Total		74,726	538,080	492,231	128,775	131,350	133,978	184,030	139,390	142,178	0	51,777	0	1,403,709	2,016,515

Project Information Sheet

Project: 802951 WPCP Records Update

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1999-00	Phase:	Planning	Project Manager:	Lorrie Gervin
Planned Completion Year:	2004-05	% Complete:	n/a	Project Coordinator:	Dan Hammons
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management			Goal:	3.3C
Sub-Element:	3.3 Sanitary Sewer System			Neighborhood:	City Wide
Fund:	455 Utilities			Sub-Fund:	300 Wastewater Management

Statement of Need

Project 802950 WPCP Records Update Facility Study resulted in the need to update records using Computer Aided Design (CAD) technology. This project will result in bringing all the Water Pollution Control Plant (WPCP) technical drawings to an "as-built" condition, as well as provide for hardware and software to allow easy record maintenance. Project moved to FY 2004/2005.

Service Level

no service level effect

Issues

none

Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
Project Costs	0	0	21,016	0	0	0	0	0	0	0	0	0	21,016	21,016
Revenues														
Total	0	0											0	0
Transfers-In														
Utilities Fund - Sewer			21,016	0	0	0	0	0	0	0	0	0		
Total	0	0											21,016	21,016
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 819550 Laboratory Information Management System

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1997-98	Phase:	Planning	Project Manager:	Lorrie Gervin
Planned Completion Year:	2003-04	% Complete:	50	Project Coordinator:	none
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management			Goal:	3.3C
Sub-Element:	3.3 Sanitary Sewer System			Neighborhood:	City Wide
Fund:	455 Utilities			Sub-Fund:	300 Wastewater Management

Statement of Need

This project is to study the feasibility of implementing a laboratory information management system. Pretreatment program will be replaced 11/02. Phase II will be the acquisition of a laboratory information system required for electronic data submittal to state regulatory agencies.

Service Level

no service level effect

Issues

none

Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
Project Costs	20,090	41,910	0	0	0	0	0	0	0	0	0	0	0	62,000
Revenues														
Total	0	0											0	0
Transfers-In														
Total	0	0											0	0
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 822530 Regulatory Compliance - Air/Emission Standards Requirements

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Implementation	Project Manager:	Lorrie Gervin
Planned Completion Year:	2007-08	% Complete:	0	Project Coordinator:	Kristy McCumby
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management			Goal:	3.3C
Sub-Element:	3.3 Sanitary Sewer System			Neighborhood:	City Wide
Fund:	455 Utilities			Sub-Fund:	300 Wastewater Management

Statement of Need

Special Project to fund the re-issuance of the WPCP Title V Air permit using a qualified consultant that will review all regulatory requirements and prepare application package. Establish monitoring and record keeping requirements and implement as needed based on new permit requirements. Operating costs include air monitoring for engine emissions and other testing as required in the permit.

Service Level

Compliance with federal, state and local air regulators.

Issues

Actual costs may vary as air regulations are issued by the Bay Area Air Quality Management District and EPA.

Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
Project Costs	173	48,712	0	0	0	0	0	0	0	0	0	0	0	48,885
Revenues														
Total	0	0											0	0
Transfers-In														
Total	0	0											0	0
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 822560 Energy Use Audit

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Dan Hammons
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management			Goal:	3.3C
Sub-Element:	3.3 Sanitary Sewer System			Neighborhood:	City Wide
Fund:	455 Utilities			Sub-Fund:	300 Wastewater Management

Statement of Need

The plant generates electric power and hot water as by-products of the treatment process. An in-depth evaluation of the system will provide a strategy and improvements for more cost-efficient use of these resources within the plant facilities thereby reducing dependence on outside energy providers to improve plant reliability and cost effective electrical production of export of power. Future projects will be proposed to implement the recommendations made in the study. These projects will result in operating cost savings.

Service Level

none

Issues

none

Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
Project Costs	0	75,000	300,000	0	0	0	0	0	0	0	0	0	300,000	375,000
Revenues														
Total	0	0											0	0
Transfers-In														
Utilities Fund - Sewer			300,000	0	0	0	0	0	0	0	0	0		
Total	0	0											300,000	300,000
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 822660 Feasibility Study of Effluent Disinfection Alternatives

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Planning	Project Manager:	John Addeo
Planned Completion Year:	2003-04	% Complete:	50	Project Coordinator:	none
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management			Goal:	3.3C
Sub-Element:	3.3 Sanitary Sewer System			Neighborhood:	City Wide
Fund:	455 Utilities			Sub-Fund:	300 Wastewater Management

Statement of Need

Currently the WPCP uses chlorine gas and sulfur dioxide for disinfection of tertiary effluent. Alternative methods and technology has evolved that may allow for safer, more cost effective disinfection. A study would look at those alternatives and pilot test technology and systems to verify actual performance at the Sunnyvale WPCP. This work should be completed in two years. Based on the results of this study & testing, staff will select the appropriate new system to be installed. It is estimated at this time approximately $100,000 will be required to develop appropriate RFP & Plans & Specifications for implementation of New System. Also an engineer's estimate for construction in current day dollars for a UV system is $3.6 million.

Service Level

This need would greatly address service delivery plans for 34202 - WPCP Operations and 34206 - By-Products Reuse. The service levels for both SDP's is critically dependent on safety, meeting regulatory standards (100%) and cost efficiency. SDP 34202 outcome statement requires that we "plan new or expanded facilities to maintain National Pollution Discharge Elimination System (NPDES) compliance and to ensure cost effective operations."

Issues

Major issues related with the need to investigate alternate disinfection methods to replace the presently used chlorine and sulfur dioxide systems are safety of plant personnel and the community, consistent regulatory compliance for discharge, consistent compliance for delivery of recycled water and Hazardous Material Handling currently required to Toxic Gas Compliance required for handling chlorine and sulfur dioxide.

Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
Project Costs	21,495	23,505	0	0	0	0	0	0	0	0	0	0	0	45,000
Revenues														
Total	0	0											0	0
Transfers-In														
Total	0	0											0	0
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 823140 Structural and Infrastructure Assessment at WPCP

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Planning	Project Manager:	Lorrie Gervin
Planned Completion Year:	2003-04	% Complete:	0	Project Coordinator:	none
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management			Goal:	3.3C
Sub-Element:	3.3 Sanitary Sewer System			Neighborhood:	City Wide
Fund:	455 Utilities			Sub-Fund:	300 Wastewater Management

Statement of Need

The infrastructure needs of the Water Pollution Control Plant (WPCP) are not yet fully funded. This project provides for an inventory of infrastructure, as well as condition assessment to determine remaining useful life, replacement costs, and to identify immediate structural rehabilitation needs. There are four specific areas that this project will focus on over a two year period: 1) seismic upgrade of process structure, 2) evaluation of structural conditions, and 3) slide gate replacement. Areas one and two will be completed during FY 2002/2003 and areas three and four will be completed during FY 2003/2004.

Service Level

no service level effect

Issues

none

Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
Project Costs	5,937	123,484	0	0	0	0	0	0	0	0	0	0	0	129,421
Revenues														
Total	0	0											0	0
Transfers-In														
Total	0	0											0	0
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 823220 Wastewater Data/Process/Service Assessment Studies

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Ongoing	Project Manager:	Lorrie Gervin
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	none
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management			Goal:	3.3C
Sub-Element:	3.3 Sanitary Sewer System			Neighborhood:	City Wide
Fund:	455 Utilities			Sub-Fund:	300 Wastewater Management

Statement of Need

This project will fund various wastewater studies at the Water Pollution Control Plant (WPCP) over a ten-year period. These studies include the following:
WPCP Data Management - The WPCP data management systems including the LIMS, Pretreatment, OPTO 22, operational SCADA and Support Services reporting needs shall be addressed. Consideration of long term maintenance of the system including upgrading requirements and schedule for same to be part of the project.
Plant Process Assessment - This project is a process engineering evaluation to determine WPCP treatment processes for sustainability, cost-effectiveness, and efficiency.
Laboratory Service Study/Market Analysis - Env lab service enhancements and cost efficiencies can be made by increasing the lab's ability to incorporate replacement equipment, methods, and procedures. These improvements will greatly enhance the lab's ability to bring in-house work currently contracted out when it is more cost effective to do so, and vice-versa.

Service Level

no service level effect

Issues

none

Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
Project Costs	27,031	225,469	128,775	128,775	131,350	133,978	136,657	139,390	142,178	0	0	0	941,103	1,193,603
Revenues														
Total	0	0											0	0
Transfers-In														
Utilities Fund - Sewer			128,775	128,775	131,350	133,978	136,657	139,390	142,178	0	0	0		
Total	0	0											941,103	941,103
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 824340 Wastewater Cost of Service Study

Category:	Special	Type:	Sanitary Sewer	Department:	Finance
Origination Year:	2002-03	Phase:	Ongoing	Project Manager:	Tim Kirby
Planned Completion Year:	2004-05	% Complete:	n/a	Project Coordinator:	Kristy McCumby
Origin:	Staff			Interdependencies:	Public Works
Element:	3 Environmental Management			Goal:	
Sub-Element:	3.3 Sanitary Sewer System			Neighborhood:	City Wide
Fund:	455 Utilities			Sub-Fund:	300 Wastewater Management

Statement of Need

Every four years the Utilities Division in the Dept of Finance performs a cost of service study on the wastewater system to reallocate the costs of the City's wastewater services among the various customer classes based on their use of each service. Staff works with a consultant to develop a cost of service model or update an existing model with current data. The study generates a cost of service for each customer class and recommends adjustments to the rate structure to ensure costs are recovered on an equitable basis from the different customer classes.

Service Level

none

Issues

none

Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
Project Costs	0	0	42,440	0	0	0	47,373	0	0	0	51,777	0	141,590	141,590
Revenues														
Total	0	0											0	0
Transfers-In														
Utilities Fund - Sewer			42,440	0	0	0	47,373	0	0	0	51,777	0		
Total	0	0											141,590	141,590
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0